

AMENDMENTS TO THE CLAIMS

1. (currently amended): ~~The implant system according to claim 22 wherein the second implant further comprises:~~ An implant system for fixation of a fractured bone, comprising:

a first implant defining a first longitudinal axis, the first implant further defining a channel and a bore in communication with the channel, the bore disposed at a predetermined angle with respect to the first longitudinal axis;

a second implant defining a second longitudinal axis and having:

a shaft having a proximal end and a distal end, the shaft defining the longitudinal axis between the proximal end and the distal end;

at least one substantially flat engagement surface; and

a plurality of blades disposed on at least a portion of the shaft and helically twisted about the longitudinal axis, the plurality of blades having a proximal end and a distal end;

wherein at least one of the blades has a variable blade width that varies in a direction along the longitudinal axis[.] and the second implant is slidable along the second longitudinal axis within the bore; and

a body member receivable in the channel, and including at least one prong having a substantially flat engagement surface, the prong and implant engagement surfaces designed and configured to interact to substantially prevent rotation of the second implant with respect to the first implant about the second longitudinal axis;

wherein the prong and second implant are configured and dimensioned to limit sliding of the second implant to a predetermined distance along the second longitudinal axis.

2. (original): The implant of claim 1, wherein the variable blade width increases in a direction from the blade proximal end toward the blade distal end.

3. (original): The implant of claim 1, wherein at least one of the blades has a variable blade height that varies in a direction along the longitudinal axis.

4. (original): The implant of claim 1, wherein at least one of the blades has a substantially constant blade width.

5. (original): The implant of claim 1, wherein the plurality of blades twist about 90° about the longitudinal axis.

6. (original): The implant of claim 3, wherein the variable blade height increases in a direction from the blade proximal end toward the blade distal end.

7. (original): The implant of claim 3, wherein at least one of the blades has a substantially constant blade height.

8. (original): The implant of claim 1, wherein the plurality of blades comprises:
at least first and second blades substantially diametrically opposed from one another about the longitudinal axis; and
at least third and fourth blades substantially diametrically opposed from one another about the longitudinal axis;
wherein at least one of the first and second blades has a variable blade width that increases in a direction along the longitudinal axis, and at least one of the third and fourth blades has a variable blade height that increases in a direction along the longitudinal axis.

9. (original): The implant of claim 6, wherein the variable blade height is substantially zero at the blade proximal end.

10. (original): The implant of claim 9, wherein:
at least one of the first and second blades has a substantially constant blade height;
and
at least one of the third and fourth blades has a substantially constant blade width.

11. (original): The implant of claim 10, wherein:
the first and second blades have a variable blade width that increases in a direction along the longitudinal axis, and a substantially constant blade height;

the third blade has a variable blade height that increases in a direction along the longitudinal axis, and a substantially constant blade width; and

the fourth blade has a substantially constant blade height, and a substantially constant blade width.

12. (original): The implant of claim 11, wherein the first and second blades are out of phase with the third and fourth blades by about 90° about the longitudinal axis.

13. (currently amended): The implant system according to claim 22 1 wherein the second implant further comprises:

~~a shaft defining the longitudinal axis of the second implant, the shaft including~~ a bladed portion and a non-bladed portion, the bladed portion and the non-bladed portion each defining a diameter;

a plurality of blades disposed on the bladed portion and helically twisted about the longitudinal axis, wherein the maximum diameter of the bladed portion is smaller than the maximum diameter of the non-bladed portion.

14. (previously presented): The implant system of claim 13, wherein the non-bladed portion includes a tapered region located substantially adjacent the bladed portion; wherein the tapered region defines a tapered region diameter that decreases in a direction toward the bladed portion.

15. (previously presented): The implant system of claim 14, wherein the tapered region further defines a neck diameter at a point substantially adjacent the blades, wherein the neck diameter is smaller than the blade diameter.

16. (previously presented): The implant system of claim 14, wherein the implant has proximal and distal ends located on the longitudinal axis, and the bladed portion is located substantially adjacent one of the ends.

17. (cancel)

18. (cancel)

19. (cancel)

20. (cancel)

21. (cancel)

22. (cancel):

23. (currently amended): The implant system of claim 22 1, further comprising a drive member rotatably coupled to the body member, the drive member configured and dimensioned for threadable engagement within the channel to selectively position the body member against the second implant.

24. (original): The implant system of claim 23, wherein when the body member and drive member are received in the channel, a cannulation is defined through the first implant, body member, and drive member such that a guide wire may be inserted completely through the cannulation.

25. (cancel)

26. (currently amended): The implant system of claim 22 1, wherein the second implant engagement surface defines a first end and a second end longitudinally spaced from the first end, and includes stops formed adjacent at least one of the ends for contacting the prong to prevent further sliding of the second implant.

27. (currently amended): The implant system of claim 22 1, wherein the body member includes at least two prongs each defining a first engagement surface, and the second implant defines at least two second engagement surfaces.

28. (original): The implant system of claim 27, wherein at least one of the prongs is longer than another one of the prongs.

29. (currently amended): The implant system of claim 22 1, wherein the first implant is an intramedullary nail.

30. (cancel):

31. (cancel)

32. (cancel)
33. (cancel)